

[0056] The different method steps performed are also provided in table I, shown below.

TABLE I

48	DETECT TOUCH OF OBJECT BY DETECTING VERTICAL FORCE F AND SHEAR S CAUSED BY HORIZONTAL FORCE AT PERIPHERAL REGION
50	$F > T1$?
52	PERFORM ACTION ASSOCIATED WITH OBJECT
54	DETERMINE DISTANCING FACTOR BASED ON SHEAR S
56	MOVE OBJECT DISTANCE AND DIRECTION CORRESPONDING TO DISTANCING FACTOR

[0057] The present invention has a number of advantages. It allows the use of one touch of an object to determine the movement of the object. In this way drag and drop operations are not needed. The invention furthermore allows the rearranging of objects, which is of advantage if a user has special needs regarding the outline of objects in a touch input display device. The flexible material allows the provision of an object that is tactile. Another advantage is that the size and direction of movement is detected through the horizontal force applied on an object, which simplifies the identification of the intention of a user to move it. By detecting the vertical force it is possible to discriminate between if a selection has been made to move an object or to activate the object in a simple manner.

[0058] It is possible that the control unit did not look at the vertical force; in that case it is possible to compare the shear S with a threshold and move the object if the shear is high enough.

[0059] In the first and second embodiment described above, it is not possible to look at the shear. It might also not be possible to study the vertical pressure. In this case it is possible to look at if the object was "touched" in the peripheral area 42, shown in FIG. 5. In case it was "touched" in the peripheral area 42, this is then taken as an indication that the object is to be moved. The amount of movement and the direction is then decided by the difference between the touched position and the centre area 44. This principle is furthermore possible to apply on a display element by display element basis, i.e. by comparing the touched element with a centre element and determining that a move is to be made if the distance is above a certain threshold. It is furthermore possible to also use this in the third embodiment either instead of or as a complement to determining the shear. By looking at a peripheral region, it is possible to move the object if this region is effected and not move the object if the region is not effected, which simplifies the determination for what part of an object a touching member is being detected or has caused an effect. By looking at the difference between a "touched" display element and a centre display element of an object a simple and effective determination of if the object is to be moved is provided if forces cannot be detected.

[0060] Another possible variation of all embodiments is that it is also possible to have a certain object moving mode, which can be selected by selecting a particular key. In this mode all object touches are determined to be movement of the object in question.

[0061] There is a further variation of the present invention that is possible to make, which variation will now be described with reference being made to FIGS. 8 and 9 that show a set of objects that can be a keyboard or a keypad. For the sake of simplicity each figure only shows four objects. It should be realized that as few as three could be shown or that there could be more objects shown. In the figures there is thus

shown a first 38, a second 60, a third 62 and a fourth 64 object. In FIG. 8 the user moves the first object 38 diagonally upwards to the left and the fourth object 64 diagonally downwards to the right, which is indicated by arrows. The distance moved in this example is, also for the sake of simplicity, only a movement by one display element. Once these movements have been registered by the control unit, it then goes on and moves also the second and third objects 60 and 62 in the same way, diagonally upwards to the right and diagonally downwards to the left, respectively. Thus the non-"touched" objects are rearranged in accordance with the movement of the touched objects. In this way the control unit looks at the two objects moved and moves the rest of the objects of a set of objects like a key pad in a similar fashion. In this way it is for instance possible for a user to enlarge a keyboard to better suit his hands in a simple and quick way with a limited number of operations on a limited number of objects, which is very user friendly. It should be realized that other ways to intelligently move objects based on two moved objects can be contemplated.

[0062] Another variation that is possible in the present invention is to show the object when it is being moved. The control unit thus calculates a second position based on the original first position of the object and then displays the object along the determined direction, in order to show the movement. In this way it is possible to animate the movement for showing the user how the object moves. This animation can furthermore be combined with an acceleration and deceleration of the presented movement such that the object is moved with increasing speed at the beginning of the movement and with a decreasing speed at the end of the movement. This variation has the advantage of presenting the movement of the object in a continuous user friendly way.

[0063] The control unit can be implemented in any suitable form including hardware, software, firmware or combinations of these. However, preferably, it is implemented as computer software stored in a program memory and run on one or more data processors and/or digital signal processors. The program code can also be provided on a computer program product, of which one is shown in FIG. 10 in the form of a CD ROM disc 66. This is just an example and various other types of computer program products are just as well feasible like memory sticks. The computer program product can also be provided in pure program code that can be downloaded for instance from a further server, perhaps via the Internet.

[0064] There are several more variations that are possible to the present invention. The invention was earlier described in relation to a two-dimensional display. It should be realized that the invention is not limited to this scenario. The teachings of the present invention can just as well be applied in a three-dimensional structure, where objects are shown three-dimensionally, perhaps using holograms.

[0065] The elements and components of an embodiment of the invention may be physically, functionally and logically implemented in any suitable way. Indeed the functionality may be implemented in a single unit, in a plurality of units or may be physically and functionally distributed between different units and processors

[0066] Although the present invention has been described in connection with specific embodiments, it is not intended to be limited to the specific form set forth herein. Rather, the scope of the present invention is limited only by the accompanying claims. In the claims, the term comprising does not exclude the presence of other elements or steps. Furthermore,